

# Psychosocial Determinants of Substance Use Disorders in a Resource-Limited Context: An Analytical Cross-Sectional Study in Yaounde, Cameroon

# Samuel Vianney Ntone-Enyime<sup>1</sup>, Kounga Fabiola Tchouankeu<sup>2\*</sup>, Olen Jean Pierre Kamga<sup>2</sup>, Ngoupa Gilles Gabin Mbeke<sup>2</sup>, Nguessong Manuella Sandy Dongmo<sup>2</sup>, Enyime Félicien Ntone<sup>2</sup>

<sup>1</sup>Faculty of Medicine and Pharmaceutical Sciences, University of Ebolowa (Sangmelima), Ebolowa, Cameroon
<sup>2</sup>Faculty of Medicine and Biomedical Sciences, University of Yaounde 1, Yaounde, Cameroon
Email: \*fabiolakounga@gmail.com

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# Abstract

Introduction: Substance use disorders (SUDs) are a significant public health challenge, particularly in resource-limited countries. In Yaounde, Cameroon, data on the psychosocial determinants of SUDs remain insufficient, undermining the development of effective primary prevention policies. This study aimed to identify these determinants to improve public health strategies. Methods: An analytical cross-sectional study was conducted over eight months in 2023 across three hospitals in Yaounde (General Hospital of Yaounde, Jamot Hospital in Yaoundé, and the University Teaching Hospital of Yaounde). Participants aged 13 years and above who consented to participate and were diagnosed with SUD were enrolled. Data on sociodemographic profiles and other psychosocial determinants were collected using a questionnaire. Associations between the identified determinants and SUDs were analyzed using logistic regression (p < 0.05). Results: 200 participants were included; 77% were male, aged 20 - 30 years, predominantly students (60%), and unmarried (95%). Alcohol and tramadol were the most commonly used substances. Reasons for consumption were the influence of peers (90%) and the need for relaxation (85.5%). SUDs were also significantly associated with academic failure (p = 0.044), antisocial traits (23%), and a history of psychological disorders. Conclusion: This study highlights the relationship between psychosocial determinants and SUDs in Yaounde, Cameroon. This underlines the need for targeted and tailored policies to restrict access to psychoactive substances and provide support for vulnerable populations.

#### **Keywords**

Substance Use Disorders, Psychosocial Determinants, Yaounde, Cameroon, Prevention

## **1. Introduction**

Substance use disorders (SUDs) refer to the compulsive use of one or more substances, often leading to psychological or physical dependence [1]. They represent a major public health issue, impacting not only individual health but also society. Globally, SUDs contribute to approximately 4% of morbidity, primarily driven by the consumption of alcohol, tobacco, and other illicit substances, such as cannabis. In 2019, alcohol accounted for 2.6 million deaths, whereas tobacco and illicit drugs significantly contributed to both mortality and morbidity [2] [3]. The economic costs associated with substance addiction are substantial, even in developed countries. For instance, in the United States, over \$700 billion is spent annually on healthcare, crime, and productivity losses associated with SUDs [4] [5].

In resource-limited countries, such as those in sub-Saharan Africa, the burden of substance use disorders (SUDs) is exacerbated by specific challenges, including inadequate healthcare infrastructure, a shortage of qualified personnel, and often inconsistent or insufficient public policies [6] [7]. Approximately 75% of individuals with substance-related disorders receive no treatment, worsening their health and social consequences [8] [9]. Psychological and social determinants, such as poverty, peer influence, stress management, and anxiety, play central roles in the initiation and persistence of these disorders [10]-[12].

Cameroon, located in Central Africa, shares borders with several countries, making it a strategic hub for the transit of psychoactive substances. Corruption and weak law enforcement policies worsen the situation, leading to an increase of the country vulnerability to substance-use disorders (SUDs) [13]. Recent studies revealed alarming data, 89.9% of students in Buea reported the use of psychoactive substances, such as tobacco (26.2%) and alcohol (19.7%) [14]. In Yaounde, 42.4% of high school students reported active substance use, primarily alcohol (40.5%) [15]. In 2024, Meguieze et al. found that 22.9% of secondary school students in Yaounde had used psychoactive drugs other than alcohol at least once, male gender represented 55.3% and those from nuclear families (69.2%) were particularly affected [16]. Among street children, 100% of the participants reported regular consumption of alcohol (45.9%) [17]. Key determinants were male sex, peer influence (friends out of school, 47.6%), mental health disorders such as depression, environmental factors (proximity to bars or markets, 84.9%) and easy access to drug vendors (42.3%) [16] [18]. All the above factors, associated with social conditions like parental conflict (76% of users) and great allowance, contributed to severe health manifestations, including risky sexual behaviours and medical complications, as well as political challenges in an emerging country considered as a

strategic zone for transnational traffic [13] [16] [17]. The major role of peers and recreational spots like snack bars (33.1% of initiations) highlights the urgent need of multisectoral interventions [16].

Despite these concerning findings, few studies have focused on the primary psychological and social determinants specific to urban settings such as Yaounde, leaving a gap in the scientific literature [15]. This study aimed to identify the psychosocial determinants of substance use disorders in Yaounde. It also aims to provide valuable insights to inform the development of prevention and treatment policies tailored to the Cameroonian context and other resource-limited countries.

## 2. Methods

**Study Design and Setting:** An analytical cross-sectional study will be conducted over 08 months (November 2023-May 2024). Three first-category hospitals in Yaounde were selected: the Yaounde General Hospital (YGH), Jamot Hospital in Yaounde (JHY), and the University Teaching Hospital of Yaounde (UTHY). Both hospitalized and non-hospitalized patients were enrolled in the outpatient consultation and psychiatric hospitalization units of the selected hospitals.

**Participants and sampling**: All consenting participants aged 13 years and older with a confirmed diagnosis of substance use disorder (SUD) by a mental health professional according to the DSM-5 (Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition) criteria were enrolled. The minimum sample size was calculated using Cochran's formula:  $n = (Z^2 p(1 - p))/e^2$  where *n* represents the sample size, *Z* denotes the confidence level (1.96 for a 95% confidence interval), and *p* indicates the expected prevalence of patients with substance use disorders (12.5%) [2]. The margin of error (*e*) was set at 0.1, resulting in a minimum sample size of 168 participants.

Data Collection and Analysis: Data were collected using a purposefully designed questionnaire that explored 1) participants' sociodemographic profiles, 2) the profile of substances used, 3) participants' personality traits, and 4) psychological and social determinants potentially associated with SUDs. Categorical qualitative variables were expressed as frequency. The association between psychological and social determinants and SUDs was assessed using logistic regression, with a significance threshold of p < 0.05. The confidence interval was 95%.

**Ethical Considerations**: The ethical approval was obtained by the institutional ethical review board of the Faculty of Medicine and Biomedical Sciences of the University of Yaounde 1 (Ref N°1001/UY1/FMSB/VDRC/DAASR/CSD). Before the enrollment, each participant received an informative notice and consent forms with all details about 1) the aim of the study, 2) a summary of the methodology used, 3) the risks and benefits, the investigators information, and 4) the intended use of the collected data. Participants were free to choose whether or not to participate in the study. The collected data were anonymized and used only for scientific purposes.

## 3. Results

**Sociodemographic Profile of Participants:** A total of 200 patients who met the inclusion criteria were enrolled. The majority were male (77%), students (60%), unmarried (95%), and aged between 20 and 30 years (77%). All age groups were represented, including 14 - 20 years (8%) and 30 years and older (15%) (**Table 1**).

Variables ( $N = 200$ )	n (%)
Age	
[14, 20[	16 (08)
[20, 25]	58 (29)
[25, 30[	96 (48)
[30 et +[	30 (15)
Gender	
Male	154 (77)
Female	46 (23)
Marital Status (Unmarried)	190 (95)
Occupational category	
Pupil	24 (12)
Student	121 (60)
Unemployed	32 (16)
Private sector	14 (07)
Public sector	09 (4.5)
Educational level	
None	01 (0.5)
Primary	06 (03)
Secondary	51 (25.5)
Tertiary	142 (71)

 Table 1. Sociodemographic profile of participants.

**Key psychosocial determinants:** The most commonly used substances were alcohol and tramadol, with consumption primarily driven by peer influence for purposes such as relaxation, anxiety management, and pain relief. Additionally, participants were predominantly firstborns from monogamous, two-parent families, with permissive parenting reported in 64% of the cases. Psychologically, antisocial personality traits were the most frequently observed traits. Other psychological determinants included having a substance-using relative and a history of depressive or psychotic disorders. Poor living conditions and academic failure were noted in 1.5% and 13% of the participants, respectively (Table 2).

cial determinants (N = 200)	n (%)
Peer influence	180 (90)
Substance consumed	185 (92.5)
Alcohol	49 (24.5)
Tramadol	08 (04)
Mode of consumption (in groups)	144 (72)
Objectives of consumption	
Relaxation	171 (85.5)
Anxiety management	25 (12.5)
Pain management	04 (02)
Birth order in siblings (firstborn)	161 (80.5)
Parental marital status (monogamy)	108 (54)
Presence of both parents	151 (75.5)
Permissive upbringing	128 (64)
Employment status (unemployment)	163 (81.5)
ychological determinants (N = 200)	
Personality trait (antisocial)	46 (23)
Presence of a close relative who consumes substances	170 (85)
Psychosis with disorganization	50 (25)
Psychosis without disorganization	87 (43.5)
Depressive disorders	06 (03)
Poor living conditions	03 (1.5)
Academic failure	26 (13)

 Table 2. Key social and psychological determinants identified.

Association between key psychosocial determinants and SUDs: Logistic regression analysis revealed significant associations between SUDs and several determinants, including 1) age  $\geq$  30 years, 2) type of substance used, and 3) academic failure (Table 3).

 Table 3. Relationship between psychosocial determinants and substance use disorders.

Psychosocial determinants	Beta Coeff	95% CI	p-value
Age			
[14, 20[ (Ref.*)			
[20, 25[	0.93	[-1.4, 3.3]	0.4
[25, 30[	2.3	[-0.04, 4.7]	0.054
[30 and above [	5.5	[2.5, 8.5]	<0.001
Marital status			
Single (Ref.)			
Married	0.57	[-1.9, 3.0]	0.6

Continued			
Occupational category			
Pupil (Ref.)			
Student	1.2	[-0.73, 3.1]	0.2
Unemployed	2.2	[-0.15, 4.6]	0.066
Private sector	2.6	[-0.85, 6.0]	0.14
Public sector	-2.5	[-6.4, 1.4]	0.2
Peer influence (Ref. = No)	-0.76	[-2.7, 1.1]	0.4
Substance consumed (Ref. = No)			
Alcohol	1.3	[0.02, 2.5]	0.046
Tramadol	0.39	[-2.3, 3.0]	0.8
Objectives of consumption			
Relaxation (Ref.)			
Anxiety management	-0.34	[-2.0, 1.3]	0.7
Pain management	3.7	[-0.03, 7.4]	0.052
Academic failure (Ref. = No)	3.0	[0.08, 5.8]	0.044

\*Ref. = Reference category.

### 4. Discussion

Substance use disorders (SUDs) remain a significant concern for both developed nations and resource-limited countries such as Cameroon, where more than half of the population (53.2%) resides in urban areas [19]. This study was conducted in Yaounde, where the context provides an opportunity to identify psychosocial determinants contributing to SUDs and provide insight for public policies to prevent and address SUDs in Cameroon.

**Sociodemographic profile of participants**: In this study, the participants were predominantly young, unmarried males who were either students or unemployed. These findings align with those of Metuge *et al.* (2022) in Buea, Cameroon, where participants were primarily young students with a mean age of 22.2 years [14]. This can be attributed to young individuals being in a developmental stage marked by the pursuit of social integration, identity formation, and curiosity fulfillment [20]. In a similar study in Uganda, Nakibuuka *et al.* reported that the participants were predominantly male, and unmarried, with a mean age of 20.1 years [21]. However, Nakibuuka *et al.*'s inclusion criteria restricted participants to those aged 15 - 24 y. In India, specifically in Delhi (2023), Verma *et al.* identified SUDs among men (70%), aged 15 - 35 years (90%), and unemployed (70%) [10].

**Key Psychosocial determinants:** This study highlights the significant role of psychosocial factors in substance use in Yaoundé, with peer influence, age-related factors, and academic failure being the most prominent. Key findings reveal that 90% of participants were influenced by peers, aligning with the high prevalence of group consumption (72%) and seeking relaxation (85.5%). These findings echo

those of Verma et al. (2023) in Delhi, India, where peer influence drove substance use in 50% of the participants [10], suggesting that socialization plays a critical role in the initiation and maintenance of SUDs [10]. This can be explained by the fact that in low-resource settings, educational challenges-overcrowded schools, and a lack of qualified teachers-frequently lead to academic failure, disengagement, and subsequent reliance on substances as an alternative coping strategy [19] [22]. Additionally, the pervasive stressors of poverty, unemployment, and social instability in such contexts make substance use an appealing and accessible means of relaxation, particularly given the widespread availability of low-cost substances [23]-[25]. Logistic regression analysis (Table 3) revealed significant associations between SUDs and several determinants: 1) age  $\geq$  30 years (p < 0.001), 2) academic failure (p = 0.044), and 3) alcohol consumption (p = 0.046). These results indicate that older individuals- who may face increased social or economic pressuresand those with academic setbacks are particularly vulnerable. Table 3 also suggests possible associations between SUDs and 1) younger age (25 - 30 years), 2) unemployment, and 3) alcohol use, with p-values of 0.054, 0.066, and 0.046, respectively. The near-significant p-values may be attributed to the modest sample size (n = 200). In Cameroon, where the poverty rate reaches 37.5%, unemployment and lack of prospects exacerbate stress and mental health issues, increasing the likelihood of SUDs [19] [20] [23] [26]. Additionally, alcohol's accessibility to vulnerable social groups is heightened by 1) the weak enforcement of alcohol consumption regulations and 2) the relatively low cost of alcoholic beverages produced by local breweries [18] [19]. The predominance of antisocial personality traits (23%) and history of mental disorders such as psychosis or depression (Table 2) reinforces the hypothesis of a complex interplay between individual psychological determinants and the social context, particularly in an urban setting such as Yaounde, Cameroon.

Psychosocial determinants and Cameroon's National Strategic Plan to Combat Drugs (PSNLD): The National Strategic Plan for Drug Control (PSNLD) 2024-2030 provides a comprehensive strategic and methodological framework for all actors engaged in drug control initiatives in Cameroon [19]. Developed by the Ministry of Public Health under the guidance of the National Committee for Drug Control (CNLD), the plan was technically supervised by the Directorate of Health Promotion (DPS) and supported by the Technical Secretariat of the Sectoral Health Strategy (ST/SSS) [19]. This framework aims to coordinate and enhance efforts to address drug-related challenges across the country [19]. The PSNLD identifies several determinants of SUDs, including economic precarity, substance accessibility, and social determinants such as peer influence and group consumption [19]. To address these issues, the plan emphasizes prevention and community-based communication strategies [19]. However, notable limitations emerge: 1) the absence of interventions specifically tailored to vulnerable populations, such as unemployed young adults or students; 2) inadequate support addressing individual determinants such as academic failure or psychological disorders; and

3) insufficient concrete, immediate measures to reduce the availability of key substances, such as alcohol. Moreover, the PSNLD's effectiveness hinges on institutional reforms and uncertain funding, undermining its short-term impact on the at-risk subgroups identified in this study. Optimizing PSNLD requires integrating individualized interventions and accelerating the regulation of licit substances, particularly alcohol. A study by Onyenwe *et al.* (2024) in Nigeria explored conceptual solutions for public health policies combating SUDs in resource-limited contexts such as Cameroon [23]. These proposals offer pathways to address the shortcomings of the PSNLD.

Political and Practical Implications: Findings in this study on the psychosocial determinants of substance use disorders (SUDs) in Yaounde highlighted significant political and practical implications. First, a revision of the National Strategic Plan for Drug Control (PSNLD) in order to address targeted strategies, including prevention programs on peer influence (affecting 90% of participants) and interventions to lower academic failure (p = 0.044), which is significantly associated with SUDs. This implies intersectoral collaboration among various ministries, particularly the Ministries of Health, Basic Education, and Higher Education. Secondly, the significant association between alcohol consumption and SUDs (p = 0.046) highlights the urgent need to strengthen regulations on licit substances, which remains widely accessible due to its low cost and poor enforcement of existing laws. Public policies could include higher taxation and restrictions on alcohol advertising, and stringent enforcement of age limits for alcohol purchases. Thirdly, the prevalence of antisocial traits and histories of psychotic or depressive disorders among participants recalls the critical need to enhance access to mental health services. Policies could prioritize the training of mental health practitioners and the establishment of additional specialized centers, particularly for young adults. In a resource-limited country as ours, low-cost and efficient psychological support mechanisms, such as telephone helplines or mobile applications, could also be of help. Furthermore, unemployment (affecting 81.5% of participants) and economic precarity appear as exacerbating factors for SUDs in this study. Policies promoting youth employment, such as vocational training programs or promotion of entrepreneurship could relieve the socioeconomic pressure caused by substance use and, consequently, reduce the prevalence of SUDs. Finally, given that 60% of participants are students and academic failure is a key determinant, educational programs should be applied in universities to raise awareness on SUD and boost young adults resilience against peer pressure. Existing communitybased interventions supported by local non-governmental organizations could promote positive role models and alternative social activities (e.g., sports, arts, volunteering) to dissuade youth from group-based substance use (72% of cases). All together, these multicentered strategies emphasized the need of integrated policies to address SUDs in Cameroon.

**Study Limitations**: Although this study provides relevant insights into the psychosocial determinants of substance use disorders (SUD) in Yaounde, certain limitations must be considered when interpreting the findings. The cross-sectional design does not allow the establishment of causal relationships between the identified factors—such as peer influence or academic failure—and SUD. Furthermore, although the sample size (n = 200) meets the estimated minimum threshold, it may not provide sufficient statistical power to find weaker associations, which could explain p-values approaching the significance threshold, as observed for unemployment (p = 0.066). Among other limitations is the reliance on selfreported data, which exposes the study to potential biases, such as recall bias and social desirability bias—particularly relevant in the context of substance use. Finally, the enrollement of participants from three urban hospital settings limits the representativeness of the sample relative to the general population of Yaounde, especially individuals who are not hospitalized or who reside in rural areas. To address these limitations, prospective studies with larger and more diverse samples are recommended, with the aim of better understanding the dynamics of SUD in resource-limited settings.

# **5.** Conclusion

This study highlights the critical role of psychosocial determinants in the onset and persistence of substance use disorders (SUDs), particularly peer influence, academic failure, and alcohol consumption among a young and vulnerable population. The findings confirm that SUDs are strongly associated with social determinants such as unemployment and psychological determinants, including antisocial traits and histories of mental disorders, within a resource-limited context exacerbated by the weak regulation of licit substances. Although the National Strategic Plan to Combat Drugs (PSNLD) acknowledges some of these determinants, its shortcomings, namely the lack of targeted and personalized interventions, limit its effectiveness. These results call for a revision of public policies to incorporate multidimensional measures, including economic support, improved access to education, and strengthened mental health services. Such interventions, tailored to the local context, could significantly reduce the burden of SUDs in Cameroon and other resource-limited countries like it.

# What Is Known on This Topic

1) Substance use disorders (SUDs) constitute a global public health issue, particularly in resource-limited countries, where they are exacerbated by socioeconomic determinants such as poverty, unemployment, and the weak regulation of psychoactive substances.

2) In sub-Saharan Africa, notably in Yaounde, and Cameroon, SUDs are influenced by well-documented psychosocial determinants, including peer influence, mental health disorders (e.g., depression and anxiety), and substance accessibility.

# What This Study Adds

1) This study provides an in-depth analysis of the specific psychosocial determinants associated with substance use disorders (SUDs) in urban Cameroon. Yaounde is an area that has been underexplored in the literature. By identifying significant associations between SUDs and determinants such as academic failure, age  $\geq$  30 years, and alcohol consumption, this study enhances the understanding of vulnerability profiles and their interactions within a resource-limited setting.

2) This study highlights the limitations of Cameroon's National Strategic Plan to Combat Drugs (PSNLD), particularly its failure to target specific subgroups, such as unemployed youth and students, or to address individual determinants, such as psychological disorders. By offering concrete recommendations, such as integrating economic support programs and strengthening alcohol regulation, this study provides an empirical foundation for tailoring national prevention and management policies for SUDs.

# **Authors' Contributions**

All authors were responsible for the study. They also contributed intellectually, proofread, and approved the final version of the manuscript.

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# **Conflicts of Interest**

The authors declare no conflicts of interest regarding the publication of this paper.

### References

- Huỳnh, C., Rochette, L., Pelletier, É. and Lesage, A. (2019) Définir les troubles liés aux substances psychoactives à partir de données administratives. *Santé Mentale au Québec*, 43, 39-64. <u>https://doi.org/10.7202/1058609ar</u>
- [2] Organisation Panaméricaine de la Santé (2024) Plus de 3 millions de décès annuels dus à la consommation d'alcool et de drogues, majoritairement chez les hommes. <u>https://www.who.int/fr/news/item/25-06-2024-over-3-million-annual-deaths-dueto-alcohol-and-drug-use-majority-among-men</u>
- [3] Global Status Report on Alcohol and Health and Treatment of Substance Use Disorders. <u>https://www.who.int/publications/i/item/9789240096745</u>
- [4] Domenico, P. and Giulio, P. (2024) The Analysis of Criminogenic Factors in a Sample of Drug Addicts: The Relevance of the Social-Environmental Element in Antisocial Behavior. Pilot Study. *Open Journal of Trauma*, 8, 21-27. <u>https://doi.org/10.17352/ojt.000046</u>
- [5] Caulkins, J.P., Kasunic, A. and Lee, M.A.C. (2013) 20. Estimating the Societal Burden of Substance Abuse: Advantages and Limitations of Current Methodologies. In: Greydanus, D.E., Kaplan, G., Patel, D.R. and Merrick, J., Eds., *Substance Abuse in Adolescents and Young Adults*, De Gruyter, 345-364. https://doi.org/10.1515/9783110311389.345
- [6] Kalema, D., Vanderplasschen, W., Vindevogel, S., Baguma, P.K. and Derluyn, I. (2017) Treatment Challenges for Alcohol Service Users in Kampala, Uganda. *The International Journal of Alcohol and Drug Research*, 6, 27-35. https://doi.org/10.7895/ijadr.v6i1.240

- [7] Urgessa Gita, D., Abeshu, G. and NigussieWorku, B. (2019) Street Children's Drug Abuse and Their Psychosocial Actualities Synchronized with Intervention Strategies in Southwest Ethiopia. *International Journal of Multicultural and Multireligious Understanding*, 6, 682-693. <u>https://doi.org/10.18415/ijmmu.v6i5.1170</u>
- [8] Heijdra Suasnabar, J.M. and Hipple Walters, B. (2020) Community-Based Psychosocial Substance Use Disorder Interventions in Low-and-Middle-Income Countries: A Narrative Literature Review. *International Journal of Mental Health Systems*, 14, Article No. 74. <u>https://doi.org/10.1186/s13033-020-00405-3</u>
- [9] Aisyah, S., Widyaningsih, H., Harsono, I., Anurogo, D. and Andarmoyo, S. (2024) The Influence of Economic Factors, Access to Health Services, and Social Support on Drug Abuse Prevention and Treatment Efforts in Urban Communities in East Java. *West Science Social and Humanities Studies*, 2, 86-95. <u>https://doi.org/10.58812/wsshs.v2i01.575</u>
- [10] Phogat, P. and Verma, V. (2023) Understanding Psycho-Social Factors in the Phenomenon of Substance Abuse: Lived Experiences of Recovering Addicts at Rehabilitation Facilities. *Journal of Advance Research in Science and Social Science*, 6, 1-18. <u>https://doi.org/10.46523/jarssc.06.01.01</u>
- [11] Oderinde, K.O., *et al.* (2020) Pattern of Substance Use and Psychiatric Co Morbidity among Substance Users Attending a Mental Health Facility in Damaturu, Northeast Nigeria: Outcome of a Two-Year Retrospective Review. *Journal of Alcoholism & Drug Dependence*, 8, Article No. 330. <u>https://doi.org/10.35248/2329-6488.20.8.330</u>
- [12] Akmatova, A. (2024) Social and Psychological Factors Influencing Drug Use among Young People: Analysis of Modern Society. *Bulletin of Science and Practice*, **10**, 367-373. <u>https://doi.org/10.33619/2414-2948/108/47</u>
- [13] Tamfuh, W.Y.N. (2016) Drugs and Drug Control in Cameroon. In: Kalunta-Crumpton, A., Ed., *Pan-African Issues in Drugs and Drug Control*, Routledge, 17-36. <u>https://doi.org/10.4324/9781315599335-2</u>
- Metuge, C.E., Dzudie, A., Ebasone, P.V., Assob, J.C.N., Ngowe, M.N., Njang, E., *et al.* (2022) Prevalence and Factors Associated with Substance Use among Students in Tertiary Institutions in Buea, Cameroon. *Pan African Medical Journal*, **41**, Article No. 103. <u>https://doi.org/10.11604/pamj.2022.41.103.29272</u>
- [15] Ekwoge, H.T., Mbah, S.A., Fodjo, J.N.S., Mbange, G.L., Ngarka, L., Ntone, F.E., *et al.* (2023) Substance Use among Students of Two High Schools in Yaoundé, Cameroon.
- [16] Meguieze, C., Ngole, A., Etouckey, G. and Ndombo, P. (2024) Actors of Psychoactive Drug Initiation among Adolescents in Yaoundé-Cameroon. *Open Journal of Pediatrics*, 14, 246-254.
- [17] Cumber, S.N. and Tsoka-Gwegweni, J.M. (2016) Characteristics of Street Children in Cameroon: A Situational Analysis of Demographic, Socio-Economic and Behavioural Profiles and Challenges. *African Journal of Primary Health Care & Family Medicine*, 8, a1076. <u>https://doi.org/10.4102/phcfm.v8i1.1076</u>
- [18] Edzamba, M.F. (2024) Prevalence of Substance Use and Related Behaviors among Tertiary Students: A Cross-Sectional Survey in Yaoundé, Cameroon. *American Journal of Biomedical Science & Research*, 21, 120-128. https://doi.org/10.34297/ajbsr.2024.21.002812
- [19] Comité National de Lutte contre la Drogue (Cameroun), Ministère de la Santé Publique (Cameroun) (2024) Plan Stratégique National de Lutte contre les Drogues 2024-2030.
   <u>http://cdnss.minsante.cm/?q=fr/content/plan-strategique-national-de-lutte-contreles-drogues-2024-2030</u>

- [20] Kaur, A., Mahajan, S., Deepti, S.S. and Singh, T. (2020) Socio-Psychological and Cultural Aspects of Substance Abuse: A Study Done at Swami Vivekananda Drug Deaddiction Centre, Government Medical College, Amritsar. *International Journal* of Community Medicine and Public Health, 7, 2154-2158. https://doi.org/10.18203/2394-6040.ijcmph20202460
- [21] Nakibuuka, I. and Nalubega, M.J. (2022) Factors Influencing Drug Abuse among Youth (15 - 24 Years) in Kisenyi Slum, Kampala District of Uganda. *Cognizance Journal of Multidisciplinary Studies*, 2, 89-99. https://doi.org/10.47760/cognizance.2022.v02i09.005
- [22] Barrenengoa, P. (2017) Consumo de sustancias: Factores psicosociales intervinientes en consultas a centros públicos de atención. *Revista de Psicología*, 16, 121-135. <u>https://doi.org/10.24215/2422572xe008</u>
- [23] Chinyere, A., Chinyere, O. and Ifeoma, P. (2024) Socioeconomic Determinants of Mental Health and Substance Use: A Review and Conceptual Solutions for Public Health Policy. *International Journal of Applied Research in Social Sciences*, 6, 409-420. <u>https://doi.org/10.51594/ijarss.v6i3.966</u>
- [24] Sadiron, N., Kamaluddin, M.R., Sulaiman, W.S.W. and Khairudin, R. (2019) Psikologi Penagihan Dadah: Satu Tinjauan Literatur (Drug Addiction Psychology: A Literature Review).
- [25] Garay, J.P.P., Oliver, J.M.Z., Malca, W.B. and Diaz, M.A.A. (2022) Etiological Factors of Drugs and Their Psychosocial Consequences: A Literature Review. *NeuroQuantology*, **20**, 561-567. <u>https://doi.org/10.14704/nq.2022.20.5.nq22209</u>
- [26] Sabri, B., Greene, M.C., Du, S., Solomon, S.S., Srikrishnan, A.K., Mehta, S.H., *et al.* (2021) Exploring Multilevel Determinants of Co-Occurring Violence, HIV, Mental Health and Substance Use Problems. *Journal of Ethnic & Cultural Diversity in Social Work*, **32**, 210-222. <u>https://doi.org/10.1080/15313204.2021.1964119</u>